

## **Colt Timber Sale**

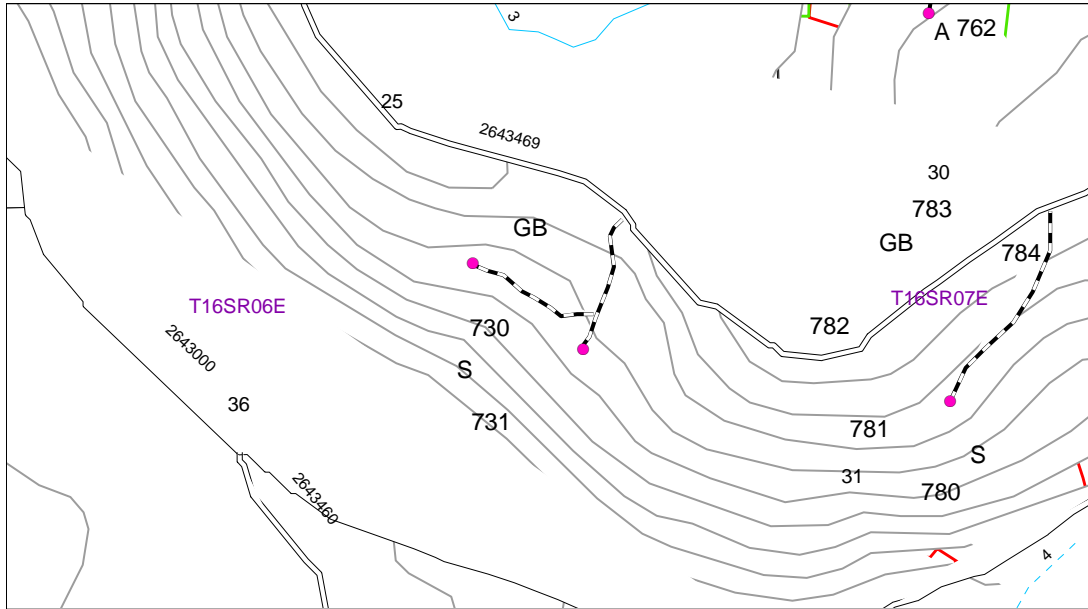
### **Logging Feasibility Report**

**Notes:** Due to the variability of the terrain throughout the sale, there may be the need of intermediate support trees in units not so stated in this analysis. Rigging heights are based on a particular profile and will also differ from given heights throughout each unit. Unless otherwise stated skyline yarding direction will be uphill and Ground Base skidding directions will be downhill. Helicopter yarding will be downhill unless otherwise stated. All skidding and yarding operations will have constraints within stream corridors in all units. See contract provision C6.42# for special yarding and skidding methods. All Ground based skid roads and landings must be approved prior to use. Skid roads will be placed 150' apart.

In those areas which are recommended for Ground Base systems, and which have slopes in excess of 30%, shovel operations can be considered. Each situation must be looked at and approved by the TSO with the cooperation of the zone Geologist.

Ground based equipment is not permitted within 120 feet of class 1, 2, and 3 streams. Ground based equipment is not permitted within 50 feet of a class 4 streams. In the remainder of the riparian reserve, ground based equipment is permitted.

**Dominant Tree Release sites:** These sites are defined on the Sale Area Map. They are defined on the ground by an orange band painted on the Dominant tree. All trees within sixty-six feet of the Dominant tree are to be removed.



Unit No& Acre: 730 (20), 731(3)      Elevation: 3350      %Slope: 20-45

Township: 16S

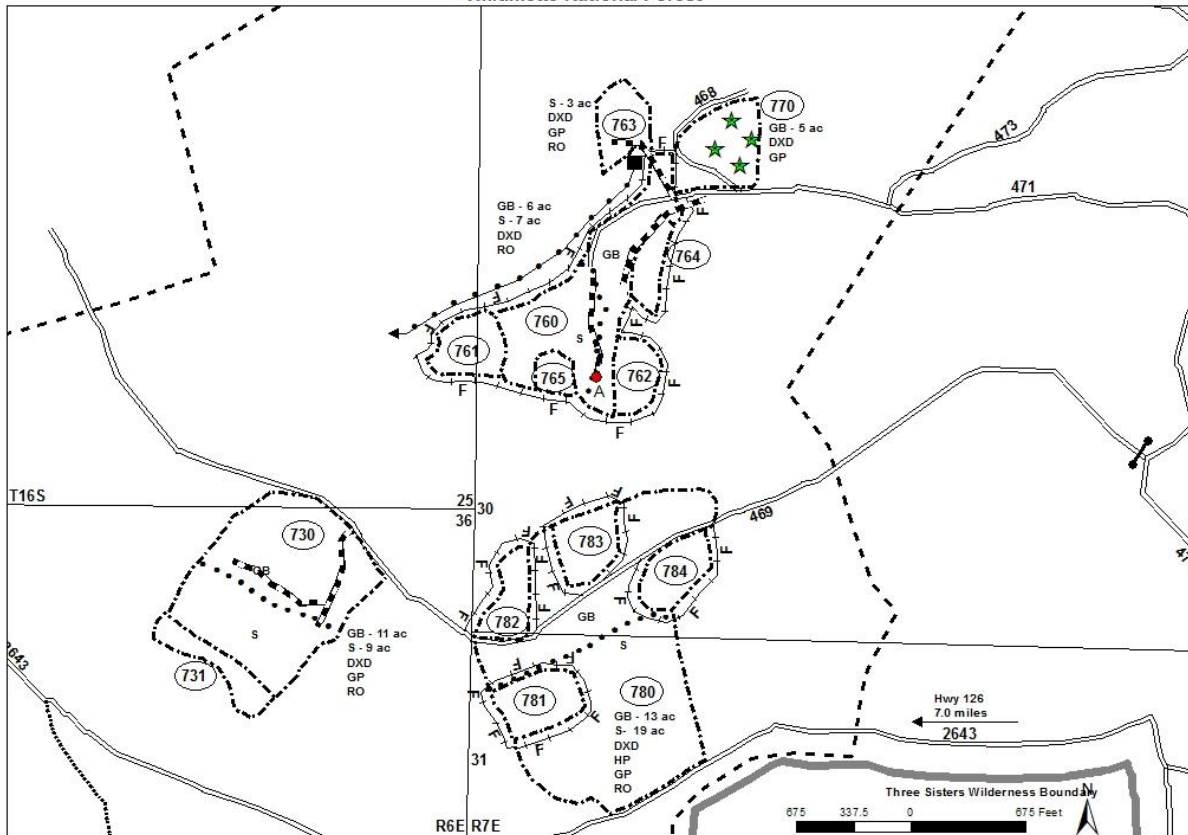
Range: 6E

Section: 36

<u>Prescribed System</u>	<u>Acres</u>
S	12
GB	11

Discussion: There is approx 1200' of temp spurs proposed for the unit. The spurs will access the lower (southern) piece of the unit for skyline yarding. Also the northern portion can be downhill skidded to the same temp spur. Some skidding can be done uphill to the 469 road. The average yarding distance is approx 300'. Average skidding distance is approx 200'.

**Colt Timber Sale  
Sale Area and Slash Disposal Map  
McKenzie River Ranger District  
Willamette National Forest**



Unit No & Acres: 760(13), 761(3), 762(2), 763(3) Elevation: 3480' %Slope: 20-45  
764(2), 765(1)

Township: 16S

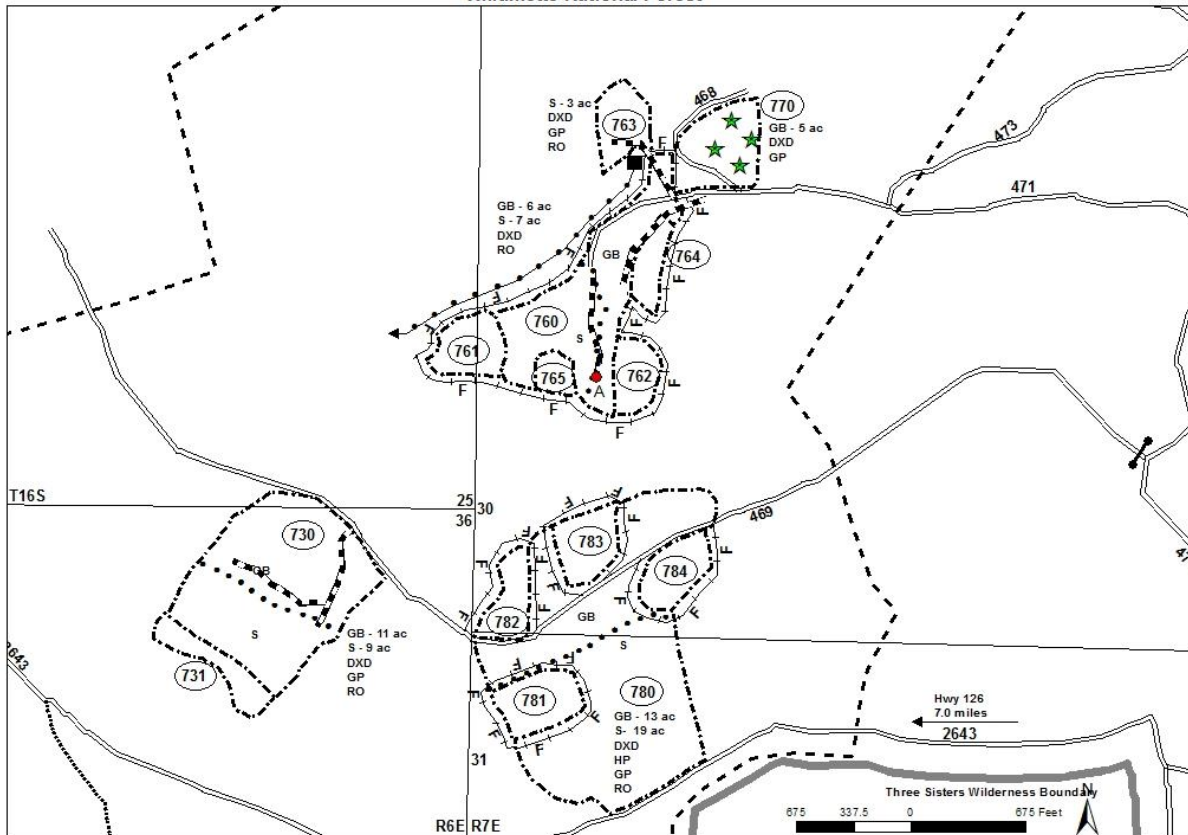
Range: 7E

Section: 30

<u>Prescribed System</u>	<u>Acres</u>
S	14
GB	10

Discussion: There is a proposed temp spur into the unit which will access to the south to landing "A". There is also an existing spur to the east and above the aforementioned temp spur which can be used. The west portion of the unit can be skyline yarded to the existing spur "A". The ground base skidding can be done to the temp spur and existing roads. Average skid distance is approx 200', average yarding distance is approx 375'.

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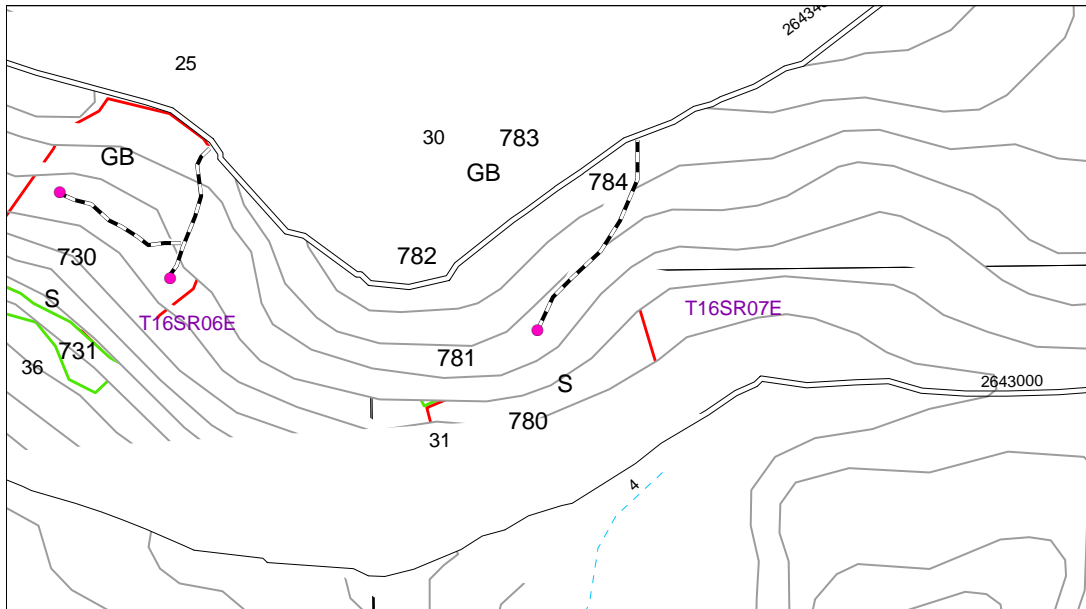


Unit No & Acres: 770      Elevation: 3480      %Slope: 10-30

Township: 16S      Range: 7E      Section: 30

<u>Prescribed System</u>	<u>Acres</u>
GB	5

Discussion: Unit will be ground based skidded to the 468 and 471 roads. Average skid distance is approx 200'. There are DTR's (Dominant Tree Release) sites in the unit, designated by "stars".



Unit No & Acres: 780(32), 781(3)  
782(2), 783(3), 784(3)

Elevation: 3480      %Slope: 10-40

Township: 16S

Range: 7E

Section: 30

<u>Prescribed System</u>	<u>Acres</u>
GB	22
S	22

Discussion: There is a proposed 1500' temp spur into the unit off the 469 road. The distance from the temp spur to the 2643 road to the south ranges from 775' to 930' with slopes ranging from 15-30%. The portion of the unit to the south of the temp spur can be skyline yarded. However it is possible to ground base skid this piece. It would be necessary to create some ramping down onto the 2643 road for skidding access. An appraisal of this portion of the unit was run using a grapple skidder, manual felling costs, and shovel swing yarding and bunching (due to some of the slopes over 30%). Uphill skidding to the temp spurs for approx 150' at 20% slope; downhill to the 2643 road using a shovel on the slopes over 30% with skidding to two landings. The appraisal showed enough of an economic savings to make ground based skidding viable. The ground slope is such that a feller buncher can be used but may not be viable to have the additional equipment on site.

The unit south of the temp spur can also be skyline yarded. It must be noted that there are areas in the unit where intermediate support trees may not be available if needed. The timber south of the 2643 road can provide for tail spar trees that would allow for a standing skyline. One profile shows the need of a 55' tailspar to obtain 1700 lb payload. One profile shows the need of a 35' tailspar for a 2600lb payload. The configurations vary significantly. This is assuming no intermediate support trees would be available.